

Synthetic surfaces for human embryonic stem cell culture.

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Public Summary:

Human embryonic stem cells (hESCs) have numerous potential biomedical applications owing to their unique abilities for self-renewal and pluripotency. Successful clinical application of hESCs and derivatives necessitates the culture of these cells in a fully defined environment. We have developed a novel peptide-based surface that uses a high-affinity cyclic RGD peptide for culture of hESCs under chemically defined conditions.

Scientific Abstract:

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